UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/852,086	05/10/2001	Hisashi Aoki	208375US2SRD	4749

22850 7590 05/03/2004

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER	
MARIAM, DANIEL G	

ART UNIT	PAPER NUMBER
2621	5

DATE MAILED: 05/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/852,086	AOKI, HISASHI	
	Examiner	Art Unit	
	DANIEL G MARIAM	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14 and 17-25* is/are rejected.

7)☒ Claim(s) *15 and 16* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 May 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites the limitation "converted by said blinking light decoder" in line 16. A similar limitation also occurs in claims 6, 17, and 18. The prior claim language recites "decoding" not "converting". Please clarify.

Since claims (2-5, 21), (7-11, 22), (24), and (19-20, and 25) directly or indirectly depend on claims 1, 6, 17, and 18 respectively, they are also rejected under 35 U.S.C. 112, second paragraph, for the same reason set forth above for claims 1, 6, 17, and 18.

Claim 7 recites the limitation "explanation information" in lines 2-3. What does this parameter mean? Please clarify.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-14 and 17-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ihara, et al. (6,389,182) in view of Theimer, et al. (5,793,630).

With regard to claim 1, Ihara, et al. (hereinafter "Ihara") discloses an input device configured to input video information (See for example item 23, in Fig. 9); a memory device, i.e., 2D code database, configured to store identification information, i.e., ID numbers of 2D codes, names of executable files, memo information, etc, corresponding to a (blinking) pattern, i.e., 2D code, of the (blinking light source) (See for example, item 56D, in Fig. 10); (a blinking light) decoder configured to decode the (blinking) pattern of the (light source blinking) in the video information input by said input device into corresponding identification information on the basis of the identification information stored in said memory device, and an output device, i.e., displaying device, configured to output together with the input video the identification information converted by (said blinking light) decoder (col. 8, lines 43-56; col. 8, line 63 through col. 9, line 46; and col. 11, lines 24-47; and col. 15, lines; and Figs. 16 and 19). Ihara does not explicitly call for a blinking pattern of a blinking light source. However, Theimer, et al. discloses a blinking pattern, i.e., blinking or flashing infrared and/or visible light pattern, a blinking light source, i.e., infrared and/or visible light source (See for example, col. 5, line 59 through col. 6, line 14). Therefore, it would have been obvious to one having ordinary skill in the art to incorporate the teaching as taught by Theimer, et al. into the system of Ihara, if for no other reason than to utilize a blinking light pattern instead of the 2d code pattern as an alternative pattern, and thereby allowing the generation and transmitting of the video information, such as electronic devices or other data, along with the identification information using infrared blinking light pattern/s (See for example, col. 2, lines 19-56; and col. 7, lines 41-56).

With regard to claim 2, an apparatus according to claim 1, wherein said blinking light decoder includes a recognizing device configured to recognize blinking of said light source by

summing luminance values of all pixels included in the video information and detecting a change in sum over several frames (broadly reads on col. 2, lines 40-51 of Theimer, et al).

With regard to claim 3, an apparatus according to claim 1, wherein said output device multiplexes the identification information and the video information while associating the identification information with the video information, and outputs the multiplexed video (See for example, Fig. 19 of Ihara).

With regard to claim 4, an apparatus according to claim 3, wherein said output device includes a converter configured to convert identification information into a sound, and a multiplexer configured to multiplex the sound and video (See for example, col. 10, line 66 through col. 11, line 5 of Ihara).

With regard to claim 5, an apparatus according to claim 1, wherein said output device represents the identification information with a character string indicating an information access point on the Internet (See for example, col. 7, lines 23-27 of Ihara).

Claim 6 is rejected the same as claim 1. Thus, argument analogous to that presented above for claim 1 is equally applicable to claim 6. Claim 6 distinguishes from claim 1 only in that it recites a location, i.e., position/coordinate in Ihara, detector configured to detect a location of the blinking light source in the video information, and an output device configured to output together with the input video the identification information converted by said blinking light decoder and the location of the blinking light source detected by said location detector. However, Ihara further (col. 10, lines 49-65; and col. 11, lines 6-18 of Ihara) teaches this feature.

With regard to claim 7, an apparatus according to claim 6, wherein when the blinking pattern includes explanation information, i.e., 2d code information, said output device includes at least one of a display device configured to display the explanation information and an audio device configured to output the explanation information by a sound (col. 10, line 57 through col. 11, line 5 of Ihara).

Claims 8, 9, 10, and 11 are rejected the same as claims 2, 3, 4 and 5 respectively. Thus, arguments similar to those presented above for claims 2, 3, 4, and 5 are equally applicable to claims 8, 9, 10, and 11.

Claim 12 is rejected the same as claim 1. Thus, argument analogous to that presented above for claim 1 is equally applicable to claim 12. Claim 12 distinguishes from claim 1 only in that it recites a video-processing device configured to selectively process the input video in accordance with the identification information converted by said blinking light decoder. However, Ihara (See for example, the content of item 56D, in Fig. 10; and the four menu selection, in Fig. 17) teaches this feature.

With regard to claim 13, an apparatus according to claim 12, wherein said processing device masks a video portion specified by the identification information (See for example, Fig. 19 of Ihara).

With regard to claim 14, an apparatus according to claim 13, wherein when the identification information requests no capturing, said processing device smudges the specified video portion (broadly reads on item 120, in Figs. 16 and 18 of Ihara).

Claim 17 is rejected the same as claim 1. Thus, argument analogous to that presented above for claim 1 is equally applicable to claim 17. Claim 17 distinguishes from claim 1 only in that it recites a message output device configured to output a preset message, i.e., search in progress, memo, acquired, etc, in accordance with the identification information converted by said blinking light decoder. Ihara further (See for example, Fig. 21; and Fig. Fig. 30) teaches this feature.

Claim 18 is rejected the same as claim 6. Thus, argument analogous to that presented above for claim 6 is equally applicable to claim 18. Claim 18 distinguishes from claim 1 only in that it recites a subject memory device, i.e., item 56, in Fig. 9, configured to store identification information representing a subject, i.e., face, portable telephone, etc, to be detected, and a subject detection device configured to detect a location of the subject having the identification information that is converted by said blinking light decoder and stored in said subject memory device, on the basis of the location of the blinking light source detected by said location detector. Ihara further (See for example, col. 10, lines 57-65) teaches this feature.

With regard to claim 19, an apparatus according to claim 18, wherein said subject detection device detects a plurality of subjects, i.e., face, telephone, etc, on the basis of a plurality of pieces of identification information, i.e., 2D code ID, file name, memo information, etc, corresponding to a plurality of blinking light sources (See for example, Fig. 10, 16, and 30 of Ihara).

With regard to claim 20, an apparatus according to claim 19, wherein said subject detection device includes an output device configured to output a warning (this feature is

considered inherent within the indication "search in progress" shown at the bottom of the display shown in Fig. 21) when all the subjects corresponding to the plurality of pieces of identification information in the video information cannot be detected (it is obvious if not inherent that the search in progress such as the one shown in Fig. 21 of Ihara does alarm the user the acquired or detected video information by showing an "ACQUIRED" signal at the bottom of Fig. 22, and obviously the system does have the capability of showing "not found or no acquired" in the event the search does not detect the video information).

With regard to claim 21, a transmitter used in said video information processing apparatus defined in claim 1, comprising: a blinking pattern memory device configured to store a blinking pattern representing identification information of a subject, and a blinking light source configured to blink and emit light in accordance with the blinking pattern stored in said blinking pattern memory device (See for example, col. 2, lines 20-56 of Theimer, et al).

Claims 22-25 are rejected the same as claim 21. Thus, argument similar to that presented above for claim 21 is equally applicable to claims 22-25.

Allowable Subject Matter

5. Claims 15 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The closest prior art to Ihara, et al. does not teach or fairly suggest wherein said blinking light decoder includes means for dividing a video in a number of video elements arranged in a matrix pattern, means for calculating a motion vector at each of the video elements and means for determining as a region to be processed a portion having a motion

vector different from a background; and wherein said blinking light decoder includes a detector configured to detect as a region to be processed a portion where a hue histogram greatly changes in a video region expanded from a portion of the blinking light source. It is for this reason in combination with other elements of the claims that claims 15 and 16 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent Number 5,036,385 and 5,611,038.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL G MARIAM whose telephone number is 703-305-4010. The examiner can normally be reached on M-F (7:00-4:30) FIRST FRIDAY OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, LEO BOUDREAU can be reached on 703-305-4607. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DANIEL MARIAM
PRIMARY EXAMINER

April 28, 2004